II.   REMARKS

By the present amendment, claims 4, 12-14, 27 and 28 have been cancelled without prejudice. Claims 5-8 and 15-26 have been amended, and new independent claims 29-34 have been added. More specifically, new independent claims 29-34 correspond to previous claims 4, 12-14, 27 and 28, respectively, rewritten in independent form. Therefore, claims 29-34 have the same scope as previous claims 4, 12-14, 27 and 28.

Claims 5-8 and 15-26 have been amended to improve clarity. Claims 17, 20, 23 and 26 have been further amended to depend upon new independent claim 29, which has no further limiting effect on the scope of claims 17, 20, 23 and 26.

The present amendment adds no new matter to the above-captioned application.

A.   The Invention

The present invention pertains broadly to a data processing method for extracting a subset from tabular format data, and to a data processing program stored in memory of a computer and operating the computer to extract a subset from tabular format data, such as may be used to efficiently process a subset of tabular format data. In accordance with an embodiment of the present invention, a data processing method for extracting a subset from tabular format data is provided that includes steps recited by independent claim 1. In accordance with another embodiment of the present invention, a data processing method for extracting a subset from tabular format data is provided that includes steps recited by independent claim 3. In accordance with another embodiment of the present invention, a data processing program stored in memory of a computer and operating the computer to extract a subset from tabular format data is provided that includes features recited by independent claim 9. In accordance with still another embodiment of the present invention, a data processing program stored in memory of a computer and operating the computer to extract a

subset from tabular format data is provided that includes features recited by independent claim 11. In accordance with another embodiment of the present invention, a data processing method for extracting a subset from tabular format data viewed as an array of records is provided that includes features recited by independent claim 29. In accordance with another embodiment of the present invention, a data processing program stored in memory of a computer and operating the computer to extract a subset from tabular format data viewed as an array of records is provided that includes features recited by claim 30. In accordance with still another embodiment of the present invention, a data processing method for extracting a subset from tabular format data viewed as an array of records is provided that includes features recited by independent claim 31. In accordance with another embodiment of the present invention, a data processing method for extracting a subset from tabular format data viewed as an array of records is provided that includes features recited by independent claim 32. In accordance with yet another embodiment of the present invention, a data processing program stored in memory of a computer and operating the computer to extract a subset from tabular format data viewed as an array of records is provided that includes features recited by independent claim 33. In accordance with still another embodiment of the present invention, a data processing program stored in memory of a computer and operating the computer to extract a subset from tabular format data viewed as an array of records is provided that includes features recited by independent claim 34. Various other embodiments, in accordance with the present invention, are recited by the dependent claims.

An advantage provided by the various method and program embodiments of the present invention is that a subset of tabular-format data can be efficiently processed by shortening the amount of processing time required.

B.   The Rejections

Claims 4-8 and 12-28 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly indefinite.

Claims 1 and 2-28 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Shinji Furusho (JP 2000-339390, hereafter the "Kosho Document" or "Kosho")[1] in view of Shinji Furusho (U.S. Patent 6,721,751 B1, hereafter, the "Furusho Patent" or "Furusho").

Applicant respectfully traverses the Examiner's rejections and requests reconsideration of the above-captioned application for the following reasons.

C.   Applicant's Arguments

In view of the present amendment, claims 1-3, 5-11, 15-26 and 29-34 are now in compliance with 35 U.S.C. § 112.

Applicant notes the Examiner's admission that the Kosho Document and the Furusho Patent are equivalent documents (Office Action, dated September 15, 2009, at 12, lines 1-11). Therefore, any feature of the presently claimed invention that is not disclosed by the Furusho Patent is also not disclosed by the Kosho Document, and is also not disclosed by the combined disclosures of the Furusho Patent and the Kosho Document.

i. The Section 103 Rejection

A prima facie case of obviousness requires a showing that the scope and content of the prior art teaches each and every element of the claimed invention, and that the prior art provides some teaching, suggestion or motivation, or other legitimate reason, for combining the references in the manner claimed. KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727,

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[1] In Amendment (C) filed July 6, 2009, Applicant refers to JP 2000-339390 as the "Shinji Document" and in the present paper, Applicant refers to JP 2000-339390 as the "Kosho Document" in accordance with the Examiner's label for the JP 2000-339390 document in the Office Action mailed September 15, 2009.

1739-41 (2007); <u>In re Oetiker</u>, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992). In this case, the

Examiner has failed to establish a <u>prima facie</u> case of obviousness against the claimed

invention because the Kosho Document and the Furusho Patent, either alone or in

combination, fails to teach each and every limitation recited by Applicant's claims.

ii. The Kosho Document

The Kosho Document discloses a method for combining tabular format data (See

English Machine translation corresponding to JP 2000-339390, claim 1, provided by the

Examiner with the Office Action of September 16, 2008). Applicant points out that the

Kosho Document (JP 2000-339390) corresponds to WIPO Document WO 00/73939 A1, a

copy of which is of record, and to U.S. Patent 6,721,751 B1 (i.e., the Furusho Patent) as

evident from The Delphion Integrated View corresponding to U.S. Patent 6,721,751 B1, a

copy of which is of record as "Exhibit A" (See also "Declaration under 37 C.F.R. § 1.132" by

Shinji Furusho, filed July 6, 2009, and hereafter referred to as the "First Furusho

Declaration," ¶¶ 1-5). In view of these facts, Applicant will discuss the disclosure of the

Kosho Document with reference to the Furusho Patent and the Kosho Document.

Before discussing the disclosure of the Kosho Document, <u>Applicant draws the</u>

<u>Examiner's attention to the fact that Applicant is the inventor of both the subject matter of the</u>

<u>Kosho Document and the subject matter of the present application</u> (First Furusho Declaration,

¶ 1; and see also "Second Declaration under 37 C.F.R. § 1.132" by Shinji Furusho, filed

herewith, and hereafter referred to as the "Second Furusho Declaration," ¶¶ 1 and 12).[2]

The Kosho Document discloses a structure for table-format data with a small data size

whereby a plurality of tables of table-format data can be joined as desired, a method of

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[2] In the First Furusho Declaration, Declarant refers to JP 2000-339390 as the "Shinji Document." In the Second Furusho Declaration, Declarant refers to JP 2000-339390 as either the "Shinji Document" or the "Kosho Document."

concatenating table-format data, and a method for displaying concatenated table-format data (See Abstract of the Furusho Patent, and see Abstract of the Kosho Document). In accordance with the method disclosed by the Kosho Document, each table of table-format data is constructed in a manner such that each table is divided into one or more information blocks consisting of: (i) a value list in which the field values are stored in the order of a field value number corresponding to the field value belonging to a specified field, and (ii) a pointer array in which pointer values for pointing to said field value numbers are stored in a unique record order (See Abstract of the Furusho Patent, and see Abstract of the Kosho Document).

In other words, the Kosho Document discloses a method of concatenating a plurality of tables of table-format data where each table is represented by an array of records containing a field and the field values contained therein, wherein the method comprises the steps of: (a) constructing each table of table-format data in a manner such that each table is divided into one or more information blocks consisting of (i) a value list in which the field values are stored in the order of a field value number corresponding to the field value belonging to a specified field, and (ii) a pointer array in which pointer values for pointing to said field value numbers are stored in a unique record order; (b) finding equivalent fields among a plurality of tables of table-format data, identifying the information blocks for the equivalent fields in each of the plurality of tables of the table-format data; and (c) comparing the value lists contained in the identified information blocks, and setting both value lists to the same values, at the time of setting the value lists to the same values, adding pointer values to associated pointer arrays in the information block to which that field value is added, and by making the value lists contained in the information blocks for specific fields in the plurality of tables of table-format data equivalent, concatenating the table-format data (See, e.g., claim 1 of the Furusho Patent, and claim 1 of the Kosho Document).

However, the Kosho Document does not teach, or even suggest, (i) "creating an ordered set array containing record numbers of records selected from the array of records, wherein the selected record numbers are arranged in a specified order in the ordered set array" and (ii) "arranging a pointer value in the first pointer array at a position indicated by each of the record numbers of the ordered set array into an item value number array at a position corresponding to a position where the record number is arranged in the ordered set array" as recited by independent claims 1, 3, 9, 11 and 29-34 (See, e.g., First Furusho Declaration, ¶ 9; and Second Furusho Declaration, ¶ 9). The Kosho Document also does not teach, or even suggest, (iii)

> "creating a second value list storing value elements contained in the item value number array and a second pointer array storing position elements indicating elements in the second value list corresponding to the record numbers by referring to the item value number array, wherein
> a value in the first value list is specified from a record number of the ordered set array through a first element in the second pointer array at a position indicated by the record number and a second element in the second value list at a position indicated by the first element in the second pointer array"

as recited by claims 1, 9, 29-31 and 33, and (iv)

> "specifying a value in the first value list from a record number of the ordered set array through an element in the item value number array at a position indicated by the record number"

as recited by claims 3, 11, 32 and 34 (See, e.g., First Furusho Declaration, ¶ 9; and Second Furusho Declaration, ¶ 9).

In other words, the Kosho Document does not teach, or suggest, steps (b), (c) and (d) recited by independent claims 1, 9, 29-31 and 33, and steps (b), (c) and (d) recited by independent claims 3, 11, 32 and 34 of the above-captioned application (See, e.g., First Furusho Declaration, ¶¶ 9 and 10; and Second Furusho Declaration, ¶¶ 9 and 10). According to the embodiments of the present invention recited by claims 1, 3, 9, 11 and 29-34, a data processing method is provided that can efficiently handle a small subset from a very large tabular format data. With respect to the embodiments of the present invention recited by

claims 1, 9, 29-31 and 33, the size of the value list is shrunk because the second value list, whose size is smaller than that of the first value list, is generated. Consequently, it is possible to shorten the processing time for retrieval, aggregation, sorting and joining.

For all of the above reasons, the Examiner has failed to establish a prima facie case of obviousness against any of Applicant's claims based on the disclosure of the Kosho Document, the disclosure of the Furusho Patent, or on the combined disclosures of the Kosho Document and the Furusho Patent.

iii. The Furusho Patent

The Furusho Patent discloses substantially the same subject matter as the Kosho Document as admitted by the Examiner (Office Action, dated September 15, 2009, at 12, lines 1-11). Therefore, all of the above deficiencies shown in the disclosure of the Kosho Document, as discussed above, are also shared by the disclosure of the Furusho Patent.

For all of the above reasons, the Examiner has failed to establish a prima facie case of obviousness against any of Applicant's claims based on the disclosure of the Kosho Document, the disclosure of the Furusho Patent, or on the combined disclosures of the Kosho Document and the Furusho Patent.

iv. Rebutting the Examiner's Arguments

The Examiner admits that the Kosho Document and the Furusho Patent do not teach (i) "that the values in the second value list and the second pointer array are stored corresponding to the positions indicated in the item value number array," and the Kosho Document and the Furusho Patent do not indicate (ii) "which pointer array is used to sort or order the second value list and the second pointer array" (Office Action, dated September 15, 2009, at 6, lines 7-11). The Examiner contends, without any factual or legal basis

whatsoever, that it would have been obvious to modify the pointer array used by Kosho and Furusho to sort/order the second value list and the second pointer array so that the position indicating array (a.k.a., the item value number array) for the information block is used to sort/order the values of the second value list and the second pointer array appropriately (Office Action, dated September 15, 2009, at 6, lines 7-16). Applicants respectfully traverse the Examiner's obviousness assertion on the grounds that the Examiner has failed to demonstrate any factual basis, or legitimate reason, in support of the modification proposed by the Examiner.

a. The Examiner has Failed to Demonstrate Any Legitimate Reason for the Proposed Modification of the Art and the Examiner has Failed to Establish that a Person of Ordinary Skill Would Have Had a Reasonable Expectation of Success of Achieving the Claimed Invention Even if the Proposed Modification was Made

The Federal Circuit has ruled that a proper rejection under Section 103 requires showing (1) that a person of ordinary skill in the art would have had a legitimate reason to attempt to make the composition or device, or to carry out the claimed process, and (2) that the person of ordinary skill in the art would have had a reasonable expectation of success in doing so. PharmaStem Therapeutics, Inc. v. ViaCell, Inc., 491 F.3d 1342, 1360 (Fed. Cir. 2007). In this case, the Examiner proposes modifying the method(s) disclosed by the Kosho Document and/or the Furusho Patent; however, the Examiner has failed to establish any legitimate reason for making the modification other than to copy what Applicant has done in the present invention. Therefore, the Examiner has failed to establish any legitimate reason for modifying the subject matter disclosed by the Kosho Document and the Furusho Patent.

In addition, the Examiner has failed to show that the proposed modification would make up

the deficiencies in the disclosure of the Kosho Document and the Furusho Patent.

More specifically, the Examiner has failed to show that even if the proposed

modification asserted by the Examiner was made that the resulting method would include (i)

"creating an ordered set array containing record numbers of records selected from the array of

records, wherein the selected record numbers are arranged in a specified order in the ordered

set array" and (ii) "arranging a pointer value in the first pointer array at a position indicated

by each of the record numbers of the ordered set array into an item value number array at a

position corresponding to a position where the record number is arranged in the ordered set

array" as recited by independent claims 1, 3, 9, 11 and 29-34, (iii)

> "creating a second value list storing value elements contained in the
> item value number array and a second pointer array storing position elements
> indicating elements in the second value list corresponding to the record numbers
> by referring to the item value number array, wherein
> a value in the first value list is specified from a record number of the
> ordered set array through a first element in the second pointer array at a position
> indicated by the record number and a second element in the second value list at
> a position indicated by the first element in the second pointer array"

as recited by claims 1, 9, 29-31 and 33, and (iv)

> "specifying a value in the first value list from a record number of the
> ordered set array through an element in the item value number array at a
> position indicated by the record number"

as recited by claims 3, 11, 32 and 34. Moreover, Applicant has submitted expert testimony to

substantiate the fact that the Kosho Document and the Furusho Patent do not teach, or suggest,

these limitations (See First Furusho Declaration, ¶ 9; and Second Furusho Declaration, ¶ 9).

For all of the above reasons, the Examiner has failed to establish a prima facie case of

obviousness against claims 1, 3, 9, 11 and 29-34 of the above-captioned application.

b. Applicant Traverses Any "Official Notice" Relied Upon by the Examiner

The Examiner admits that the Kosho Document and the Furusho Patent fail to teach each and every limitation recited by the claims (Office Action, dated September 9, 2009, at 6, lines 7-11; and at 12, lines 4-5). However, the Examiner contends that it would have been obvious to modify the method(s) disclosed by the Kosho Document and the Furusho Patent so as to include the missing limitations (Office Action, dated September 15, 2009, at 6, lines 7-16), although the Examiner fails to provide any factual and/or legal basis to support the Examiner's conclusion.

To the extent that the Examiner is relying upon an "Official Notice," and/or what the Examiner contends is "basic knowledge" or "common sense" in the art, Applicant objects. Applicant reminds the Examiner that the Administrative Procedure Act requires Examiner's rejections to employ "reasoned decision making" based on evidence from a fully developed administrative record. In re Lee, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002). Patentability determinations that are based on what the Examiner believes is "basic knowledge" and "common sense," and that otherwise lacks substantial evidentiary support, are impermissible. In re Zurko, 59 U.S.P.Q.2d 1693, 1697 (Fed.Cir. 2001). Therefore, Applicant respectfully traverses the Examiner's Section 103 rejection of claims 1-3, 5-11, 15-26 and 29-34 on the grounds that any alleged "Official Notice" lacks "substantial evidentiary support." Therefore, the Examiner must now adduce substantial evidentiary support (e.g., produce a prior art reference) with respect to the subject matter claimed, namely, limitations (i) to (iv) discussed above, or withdraw the Section 103 rejection standing against claims 1-3, 5-11, 15-26 and 29-34.

For all of the above reasons, the Examiner has failed to establish a prima facie case of obviousness against claims 1-3, 5-11, 15-26 and 29-34 of the above-captioned application.

c. Applicant's Evidence Shows Deficiencies in the Disclosures of

the Kosho Document and the Furusho Patent

The Examiner has failed to prove that the Kosho Document and the Furusho Patent teach, or suggest, each and every limitation recited by Applicant's claims. On the contrary, Applicant contends that the Kosho Document and the Furusho Patent fail to teach, or suggest, (i) "creating an ordered set array containing record numbers of records selected from the array of records, wherein the selected record numbers are arranged in a specified order in the ordered set array" and (ii) "arranging a pointer value in the first pointer array at a position indicated by each of the record numbers of the ordered set array into an item value number array at a position corresponding to a position where the record number is arranged in the ordered set array" as recited by independent claims 1, 3, 9, 11 and 29-34, (iii)

> "creating a second value list storing value elements contained in the item value number array and a second pointer array storing position elements indicating elements in the second value list corresponding to the record numbers by referring to the item value number array, wherein
> a value in the first value list is specified from a record number of the ordered set array through a first element in the second pointer array at a position indicated by the record number and a second element in the second value list at a position indicated by the first element in the second pointer array"

as recited by claims 1, 9, 29-31 and 33, and (iv)

> "specifying a value in the first value list from a record number of the ordered set array through an element in the item value number array at a position indicated by the record number"

as recited by claims 3, 11, 32 and 34. The Examiner merely speculates that the method(s) disclosed by the Kosho Document and the Furusho Patent may be modified to include these limitations. Therefore, the Examiner has failed to establish a prima facie case of obviousness against any claim of the above-captioned application.

Assuming arguendo that the Examiner has, through speculation, established a prima

facie case of obviousness (which is a wildly invalid assumption), Applicant has filed

substantial evidence to establish that the Kosho Document and the Furusho Patent do not

teach, or suggest, each and every limitation of the claims, arranged as in the claims. The

Examiner has failed to properly consider Applicant's evidence for all of the following

reasons.

The Examiner erroneously contends that Applicant's evidence, namely, the First

Furusho Declaration, is not commensurate in scope with the claims because "the declaration

refers only to the system described in the above referenced application and not to the

individual claims of the application" (Office Action, dated September 15, 2009, at 11, lines 2-

8). The Examiner's contention is false on its face because the First Furusho Declaration, ¶ 9,

clearly states:

> "the Shinji Document does not teach, or even suggest, (i) "creating an
> ordered set array containing record numbers of records selected from the array
> of records, wherein the selected record numbers are arranged in a specified
> order in the ordered set array" and (ii) "arranging a pointer value in the first
> pointer array at a position indicated by each of the record numbers of the
> ordered set array into an item value number array at a position corresponding
> to a position where the record number is arranged in the ordered set array" as
> recited by independent claims **1, 3, 9 and 11**. The Shinji Document also does
> not teach, or even suggest, (iii)
>> "creating a second value list storing value elements contained in
>> the item value number array and a second pointer array storing position
>> elements indicating elements in the second value list corresponding to
>> the record numbers by referring to the item value number array,
>> wherein a value in the first value list is specified from a record number
>> of the ordered set array through a first element in the second pointer array
>> at a position indicated by the record number and a second element in the
>> second value list at a position indicated by the first element in the second
>> pointer array"
>
> as recited by **claims 1 and 9**, and (iv)
>
>> "specifying a value in the first value list from a record number of
>> the ordered set array through an element in the item value number array at
>> a position indicated by the record number"
>
> as recited by **claims 3 and 11**." (emphasis added).

The testimony of the inventor, as submitted by the First Furusho Declaration, is, on its face, commensurate is scope with the claimed invention because it refers to individual claims 1, 3, 9 and 11.

Therefore, the Examiner's contention that the First Furusho Declaration is not commensurate with the claims is unreasonable, and must be withdrawn.

The Examiner correctly acknowledges that "[w]ith regard to the teachings of the Shinji Document, the Furusho declaration has stated that steps (b), (c) and (d) are not taught " (Office Action, dated September 15, 2009, at 12, lines 12-13). However, the Examiner erroneously contends that

> "the conclusion made by the Furusho declaration merely states that the claim limitations were not taught without providing factually supported evidence indicating how the Shinji Document does not teach the claimed limitations."
> (Office Action, dated September 15, 2009, at 12, lines 13-16).

The Examiner's contention is flawed because the expert testimony of Shinji Furusho, who is the inventor of the subject matter of both the above-captioned application and the JP 2000-339390 document (i.e., the Kosho Document), (First Furusho Declaration, ¶ 1; and Second Furusho Declaration, ¶ 9), is substantial evidence tending to show the scope of subject matter disclosed by the Kosho Document, and differences between the claimed invention and the subject matter disclosed by the Kosho Document. Furthermore, because Shinji Furusho is the inventor of the subject matter of the Kosho Document, he is competent to testify as to its scope. No further supporting evidence is required.

In addition, the Examiner has failed to demonstrate that the Kosho Document, and the Furusho Patent, teach or suggest, (i) "creating an ordered set array containing record numbers of records selected from the array of records, wherein the selected record numbers are arranged in a specified order in the ordered set array" and (ii) "arranging a pointer value in the first pointer array at a position indicated by each of the record numbers of the ordered

set array into an item value number array at a position corresponding to a position where the

record number is arranged in the ordered set array" as recited by independent claims 1, 3, 9,

11 and 29-34, (iii)

> "creating a second value list storing value elements contained in the
> item value number array and a second pointer array storing position elements
> indicating elements in the second value list corresponding to the record numbers
> by referring to the item value number array, wherein
> a value in the first value list is specified from a record number of the
> ordered set array through a first element in the second pointer array at a position
> indicated by the record number and a second element in the second value list at
> a position indicated by the first element in the second pointer array"

as recited by claims 1, 9, 29-31 and 33, and (iv)

> "specifying a value in the first value list from a record number of the
> ordered set array through an element in the item value number array at a
> position indicated by the record number"

as recited by claims 3, 11, 32 and 34. On the contrary, the Examiner admits that the Kosho

Document and the Furusho Patent fail to teach each and every limitation of the claimed

invention (Office Action, dated September 15, 2009, at 6, lines 7-11, and at 12, lines 1-5),

and the Examiner has failed to show that the Kosho Document and/or the Furusho Patent

teach, or suggest, the limitations (i) to (iv) listed above.

When an Examiner asserts there is an explicit or implicit teaching or suggestion

regarding claimed limitations in the prior art, the burden is on the Examiner to indicate where

in the prior art the explicit or implicit teaching or suggestion appears. In re Rijckaert, 28

U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). **The Examiner has not met this burden**.

In other words, Applicant does not carry the burden of disproving the prior art teaches

elements of the claimed invention. Rather, it is the Examiner's burden to prove that each and

every claimed limitation is disclosed by prior art. The Examiner has not met this burden.

The First Furusho Declaration and the Second Furusho Declaration are additional evidence

showing the Kosho Document and the Furusho Patent do not teach, or suggest, limitations (i)

to (iv) recited in Applicant's claims. The Examiner has not rebutted this evidence with any

evidentiary facts (i.e., such as indicating where in the Kosho Document or the Furusho Patent the missing subject matter is to be found).

For all of the above reasons, the Examiner has failed to establish a prima facie case of obviousness against claims 1-3, 5-11, 15-26 and 29-34 of the above-captioned application.

d. Additional Arguments and Evidence

The Examiner contends that the Kosho Document and the Furusho Patent disclose

> "a data processing method for extracting a subset as a processing object from a tabular format data expressed as an array of records each including an item and an item value belonging to the item"
> (Office Action, dated September 15, 2009, at 4, lines 18-21),

as allegedly supported by Abstracts of the Kosho Patent and the Furusho Patent. (Office Action, dated September 15, 2009, at 4, lines 18-21). However, each of the Kosho Document and the Furusho Patent are directed to a method of concatenating table-format data, and method of presenting concatenated table-format data, which pertains to joining a plurality of tables of table format data and not to methods for extracting a subset as a processing object (See Abstracts of the Kosho Document and Furusho Document, and Second Furusho Declaration, ¶ 13). Thus, neither the Kosho Document nor the Furusho Patent teach, or suggest, a method for extracting a subset as a processing object as the Examiner suggests (Second Furusho Declaration, ¶ 13).

The Examiner erroneously contends that the Kosho Document and/or the Furusho Patent teaches, or suggests, "creating an ordered set array containing record numbers of records selected the array of the records" (Office Action, dated September 15, 2009, at 5, lines 4-6). The Examiner's contention is flawed because neither the Kosho Document nor the Furusho Patent discloses, or suggests, an "array containing record numbers of records selected from the array of the records" as recited by independent claims 1, 3, 9, 11 and 29-34 (Second Furusho Declaration, ¶ 14). While the Kosho Document, ¶¶ [0005] and [0012], may

disclose expressing combined table format data as an "array of records," the Kosho

Document does not teach, or suggest, an <u>ordered set array</u> containing record numbers of

records <u>selected from</u> the array of records" (Second Furusho Declaration, ¶ 14). Therefore,

neither the Kosho Document nor the Furusho Patent teaches, or suggests creating such an

ordered set array as recited by independent claims 1, 3, 9, 11 and 29-34 (Second Furusho

Declaration, ¶ 14). According to the present invention, the subset to be processed is extracted

from the tabular format data and, therefore, it is important that the ordered set array contains

record numbers of records selected from the array of records (Second Furusho Declaration, ¶

14).

The Examiner erroneously contends that the Kosho Document and the Furusho Patent

teach step (d) of claims 1, 3, 9, 11 and 29-34 , namely, "creating a second value list storing

value elements contained in the item value number array and a second pointer array storing

position elements indicating elements in the second value list corresponding to the record

numbers by referring to the item value number array" as recited by claims 1, 3, 9, 11 and 29-

34 (Office Action, dated September 15, 2010, at 5, line 20, to 6, line 2). The Kosho

Document, for example, discloses in ¶¶ [0008] and [0009] "sub tabular format data," which

pertains to one of two table-format data that are to be joined (See Second Furusho

Declaration, ¶ 15). The term "sub tabular format data" in the Kosho Document does not

mean a part or portion of the main table-format data (Second Furusho Document, ¶ 15).

Therefore, neither the Kosho Document nor the Furusho Patent teaches, or suggests,

"creating a second value list storing value elements contained in the item value number array

and a second pointer array storing position elements indicating elements in the second value

list corresponding to the record numbers by referring to the item value number array" as

recited by claims 1, 3, 9, 11 and 29-34.

According to the present invention (see, e.g., claim 1), steps (a), (b) and (c) are defined. In step (a), the whole table-format data is described by use of a first value list, and a first pointer array, in which pointer values indicating the item value numbers are stored in order of unique record numbers. In step (b), in response to selecting a part of the table-format data, an ordered set array, which describes the part of the table-format data, is created. In step (c), an item value number array containing pointer values that designate, in the first value list, the respective item values of the records in the ordered set array is created. In step (d), the item value of the record contained in the ordered set array can be specified by the second value list (which is not the first value list, but whose size is equal to or less than that of the first value list), and the second pointer array in harmony with the ordered set array and the second value list. The present invention, which includes the above mentioned features of steps (a), (b) and (c), enables the subset of the table-format data to be described by the second pointer array and the second value list, in which the size of the second pointer array and the second value list are equal to or less than those of the first pointer array and the first value list, respectively. The above argument is applicable to all independent claims 1, 3, 9, 11 and 29-34.

For all of the above reasons, neither the Kosho Document nor the Furusho Patent, either alone or in combination, teach or suggest, steps (b), (c) and (d) recited by claims 1, 3, 9, 11 and 29-34 (Second Furusho Declaration, ¶¶ 13-16).

III.   **CONCLUSION**

In view of the present amendment, claims 1-3, 5-11, 15-26 and 29-34 are now in compliance with 35 U.S.C. § 112. Furthermore, the Examiner has failed to establish a prima facie case of anticipation or of obviousness against Applicant's claimed invention because neither the Kosho Document, nor the Furusho Patent, teaches or suggests each and every
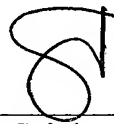
limitation of independent claims 1, 3, 9, 11 and 29-34. In fact, **the Kosho Document fails to teach steps (b), (c) and (d) of claims 1, 3, 9, 11 and 29-34**. For the same reasons, the Examiner has failed to establish a prima facie case of anticipation or of obviousness against the remaining claims, which depend either directly or indirectly one of the independent claims 1, 3, 9, 11 and 29-34.

For all of the above reasons, claims 1-3, 5-11, 15-26 and 29-34 are in condition for allowance, and a prompt notice of allowance is earnestly solicited.

The below-signed attorney for Applicant welcomes any questions.

Respectfully submitted,

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